

2 Clough Field Close
Whaley Bridge
High Peak
SK23 7GB



Ref 0995/08.20

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12th November 2021.

Mr N Broadhurst
Stubbins Farm
Stubbins Lane
Chinley
SK23 6ED.

Dear Mr Broadhurst,

STRUCTURAL SURVEY – STUBBINS FARM, STUBBINS LANE, CHINLEY.

I write to confirm the results of the visual inspection at the above carried out on 10th November 2021.

The subject building is Building 'B' as indicated on the attached drawing No. 301. Buildings 'C' & 'D' will not form part of the proposed conversion and as such these buildings have been excluded from the survey.

Building 'B' is a single storey open barn steelwork structure being currently used for housing livestock and general farm equipment.

The purpose for the inspection was to produce a general condition report highlighting structural issues in respect to the proposed conversion of Building 'B' for domestic use.

This report also contains a brief schedule of demolition works to be carried out.

Nothing in this report is to be taken as a criticism of any person or organisation.

Unless stated I have not carried out a condition inspection of any existing timber members or other parts of the structure that are covered, unexposed or inaccessible and therefore I am unable to report that any such part of the structure is free from defect.

The report is limited to the client only and must not be used by any third party without the permission of DAE Design Ltd.

Directions for the survey are taken when facing each individual elevation. The inspection was purely of a visual nature carried out only from ground level.

BARN BUILDING 'B'

GENERAL OBSERVATIONS

1.0 The inspection revealed the building to be a traditional free standing 'duo pitch' steel portal frame structure supporting timber purlins and corrugated cement fibre based roof sheeting. The building is generally enclosed by side walls consisting similar cladding to the roof system together with plain blockwork masonry dado walls.

1.1 The inspection of the portal frame members revealed these to be in excellent condition having been treated with a hot dipped galvanised system from new. The portal column and rafter members were noted as being current day steelwork member sections and therefore I would estimate the building to be no more than twenty years old.

1.2 The building appears to be structurally sound in its present form of construction. However, it was found to only have bracing in one end of the roof presumably being there to aid the initial erection of the structure. Structures of this type require a bracing system in both the roof and side bays to provide longitudinal stability. Although the building is currently stable, and has been so during its life span, I feel that it would be prudent to install additional bracing as part of the proposed conversion works.

1.3 The inspection of the roof covering did not reveal any areas of damage to any of the corrugated sheets.

1.4 The existing timber roof purlins were only viewed from ground level. However the members appear to be a suitable size member for the span and present loading condition. Additionally the purlins are not showing signs of excessive deflection and therefore I feel it will be possible for them to be retained in the proposed subject to design checks for Building Control approval.

1.5 The inspection of the barn floor revealed that this has been constructed in 'long strip' concrete panels having a light tamped finish. This form of construction is typical in buildings of this type and general use. Although an intrusive investigation of the floor has not been carried out at this time it is highly likely that it will be in the order of 150mm in thickness together with mesh fabric reinforcement. Whilst the slab has generally been laid to falls I feel it will be suitable to be retained and overlaid with a new floor system as part of the proposed works.

1.6 Foundation exposures did not form part of the survey. However given that the building appears to have been constructed to a high standard and showing no signs of movement would indicate that adequate foundations are present. Furthermore the installation of a new suitable lightweight roofing system will not impose additional loading on the existing structure and foundations.

CONCLUSIONS AND RECOMMENDATIONS

BARN BUILDING 'B'

1.0 The results of the inspection confirm that the portal structure appears to be in a sound and stable condition and currently not requiring any specific treatment or repairs. However, I would recommend that additional bracing is installed in order to ensure that the building will remain stable for the remainder of its life as previously highlighted.

1.1 Trial holes were not examined as part of the investigation to inspect foundations. However as no structural movement was evident in the structure I would not anticipate there being issues with the load capacity of the existing foundations with regard to the proposed future use. However it will be deemed necessary to install suitably designed foundations to all new load bearing masonry walls.

1.2 The existing timber roof purlins appear to be in sound condition.

1.3 Any replacement roof covering is of similar loading to that present material.

1.4 The existing floor slab appears to be generally of sound construction and therefore I feel that it is suitable to be retained as a sub base to a new floor system as previously discussed.

REPORT SUMMARY

The results of my inspection confirm that Building 'B' structural frame is in sound condition and as such is capable of being utilised for conversion to a domestic building.

Schedule of Demolition/Removals

- Timber framed Building D removed
- Lean-to structure between Building A and B removed
- Cement board cladding to external walls removed
- Cement board cladding to roof removed (existing cover of cement board could be retained)

I trust that the above will satisfy your requirements at this stage. However should you require any further information or clarification please do not hesitate to contact me.

Yours sincerely,

David A Ecob
DAE Design Limited

